OIPE

```
          RAW SEQUENCE LISTING                    DATE: 01/30/2002
          PATENT APPLICATION:  US/09/902,517      TIME: 16:16:54

          Input Set : D:\21900-20252.txt
          Output Set: N:\CRF3\01302002\I902517.raw

   3 <110> APPLICANT: Seilhamer, Jeffrey J.
   4        Lewicki, John
   5        Scarborough, Robert M.
   6        Porter, Gordon J.
   8 <120> TITLE OF INVENTION: IMMUNOASSAYS FOR HUMAN AND CANINE BRAIN
   9        NATRIURETIC PEPTIDE
  11 <130> FILE REFERENCE: 219002025213
  13 <140> CURRENT APPLICATION NUMBER: 09/902,517
  14 <141> CURRENT FILING DATE: 2001-07-09
  16 <150> PRIOR APPLICATION NUMBER: 09/287,892
  17 <151> PRIOR FILING DATE: 1999-04-07
  19 <150> PRIOR APPLICATION NUMBER: 08/850,910
  20 <151> PRIOR FILING DATE: 1997-05-05
  22 <150> PRIOR APPLICATION NUMBER: 07/477,226
  23 <151> PRIOR FILING DATE: 1990-02-08
  25 <150> PRIOR APPLICATION NUMBER: 07/299,880
  26 <151> PRIOR FILING DATE: 1989-01-19
  28 <150> PRIOR APPLICATION NUMBER: 07/206,470
  29 <151> PRIOR FILING DATE: 1988-06-14
  31 <150> PRIOR APPLICATION NUMBER: 07/200,383
  32 <151> PRIOR FILING DATE: 1988-05-31
  34 <160> NUMBER OF SEQ ID NOS: 50
  36 <170> SOFTWARE: FastSEQ for Windows Version 4.0
  38 <210> SEQ ID NO: 1
  39 <211> LENGTH: 26
  40 <212> TYPE: PRT
  41 <213> ORGANISM: Unknown
  43 <220> FEATURE:
  44 <223> OTHER INFORMATION: A portion of human ANP and pBNP.
  46 <400> SEQUENCE: 1
  47 Gly Ser Gly Cys Phe Gly Arg Lys Met Asp Arg Ile Ser Ser Ser Ser
  48 1               5                   10                  15
  49 Gly Leu Gly Cys Lys Val Leu Arg Arg His
  50             20                  25
  52 <210> SEQ ID NO: 2
  53 <211> LENGTH: 25
  54 <212> TYPE: PRT
  55 <213> ORGANISM: Unknown
  57 <220> FEATURE:
  58 <223> OTHER INFORMATION: A portion of human ANP and the pBNP.
  60 <400> SEQUENCE: 2
  61 Arg Ser Ser Cys Phe Gly Gly Arg Met Asp Arg Ile Gly Ala Gln Ser
  62 1               5                   10                  15
```

RAW SEQUENCE LISTING   DATE: 01/30/2002
PATENT APPLICATION: US/09/902,517   TIME: 16:16:54

Input Set : D:\21900-20252.txt
Output Set: N:\CRF3\01302002\I902517.raw

```
 63 Gly Leu Gly Cys Asn Ser Phe Arg Tyr
 64           20              25
 66 <210> SEQ ID NO: 3
 67 <211> LENGTH: 26
 68 <212> TYPE: PRT
 69 <213> ORGANISM: Unknown
 71 <220> FEATURE:
 72 <223> OTHER INFORMATION: A portion of human ANP and pBNP.
 74 <400> SEQUENCE: 3
 75 Asp Ser Gly Cys Phe Gly Arg Arg Leu Asp Arg Ile Gly Ser Leu Ser
 76  1           5               10              15
 77 Gly Leu Gly Cys Asn Val Leu Arg Arg Tyr
 78           20              25
 80 <210> SEQ ID NO: 4
 81 <211> LENGTH: 6
 82 <212> TYPE: PRT
 83 <213> ORGANISM: Unknown
 85 <220> FEATURE:
 86 <223> OTHER INFORMATION: An additional N-terminal amino acid extension.
 88 <400> SEQUENCE: 4
 89 Ser Pro Lys Thr Met Arg
 90  1           5
 92 <210> SEQ ID NO: 5
 93 <211> LENGTH: 17
 94 <212> TYPE: PRT
 95 <213> ORGANISM: Unknown
 97 <220> FEATURE:
 98 <223> OTHER INFORMATION: Peptides having natriuretic activity.
100 <221> NAME/KEY: VARIANT
101 <222> LOCATION: (5)...(5)
102 <223> OTHER INFORMATION: Xaa = Arg or Lys
104 <221> NAME/KEY: VARIANT
105 <222> LOCATION: (6)...(6)
106 <223> OTHER INFORMATION: Xaa = Leu or Met
108 <221> NAME/KEY: VARIANT
109 <222> LOCATION: (10)...(10)
110 <223> OTHER INFORMATION: Xaa = Gly or Ser
112 <221> NAME/KEY: VARIANT
113 <222> LOCATION: (12)...(12)
114 <223> OTHER INFORMATION: Xaa = Leu or Ser
116 <400> SEQUENCE: 5
117 Cys Phe Gly Arg Xaa Xaa Asp Arg Ile Xaa Ser Xaa Ser Gly Leu Gly
118  1           5               10              15
119 Cys
122 <210> SEQ ID NO: 6
123 <211> LENGTH: 4
124 <212> TYPE: PRT
125 <213> ORGANISM: Unknown
127 <220> FEATURE:
```

RAW SEQUENCE LISTING   DATE: 01/30/2002
PATENT APPLICATION: US/09/902,517   TIME: 16:16:54

Input Set : D:\21900-20252.txt
Output Set: N:\CRF3\01302002\I902517.raw

```
128 <223> OTHER INFORMATION: R1
130 <221> NAME/KEY: VARIANT
131 <222> LOCATION: (1)...(1)
132 <223> OTHER INFORMATION: Xaa = His, Arg or Gln
134 <221> NAME/KEY: VARIANT
135 <222> LOCATION: (2)...(2)
136 <223> OTHER INFORMATION: Xaa = Lys, Asp or Gly
138 <400> SEQUENCE: 6
139 Xaa Xaa Ser Gly
140  1
142 <210> SEQ ID NO: 7
143 <211> LENGTH: 5
144 <212> TYPE: PRT
145 <213> ORGANISM: Unknown
147 <220> FEATURE:
148 <223> OTHER INFORMATION: R1
150 <221> NAME/KEY: VARIANT
151 <222> LOCATION: (1)...(1)
152 <223> OTHER INFORMATION: Xaa = Met or Val
154 <221> NAME/KEY: VARIANT
155 <222> LOCATION: (2)...(2)
156 <223> OTHER INFORMATION: Xaa = His, Arg or Gln
158 <221> NAME/KEY: VARIANT
159 <222> LOCATION: (3)...(3)
160 <223> OTHER INFORMATION: Xaa = Lys, Asp or Gly
162 <400> SEQUENCE: 7
163 Xaa Xaa Xaa Ser Gly
164  1                 5
166 <210> SEQ ID NO: 8
167 <211> LENGTH: 6
168 <212> TYPE: PRT
169 <213> ORGANISM: Unknown
171 <220> FEATURE:
172 <223> OTHER INFORMATION: R1
174 <221> NAME/KEY: VARIANT
175 <222> LOCATION: (1)...(1)
176 <223> OTHER INFORMATION: Xaa = Thr or Met
178 <221> NAME/KEY: VARIANT
179 <222> LOCATION: (2)...(2)
180 <223> OTHER INFORMATION: Xaa = Met or Val
182 <221> NAME/KEY: VARIANT
183 <222> LOCATION: (3)...(3)
184 <223> OTHER INFORMATION: Xaa = His, Arg or Gln
186 <221> NAME/KEY: VARIANT
187 <222> LOCATION: (4)...(4)
188 <223> OTHER INFORMATION: Xaa = Lys, Asp or Gly
190 <400> SEQUENCE: 8
191 Xaa Xaa Xaa Xaa Ser Gly
192  1                 5
```

```
194 <210> SEQ ID NO: 9
195 <211> LENGTH: 7
196 <212> TYPE: PRT
197 <213> ORGANISM: Unknown
199 <220> FEATURE:
200 <223> OTHER INFORMATION: R1
202 <221> NAME/KEY: VARIANT
203 <222> LOCATION: (2)...(2)
204 <223> OTHER INFORMATION: Xaa = Thr or Met
206 <221> NAME/KEY: VARIANT
207 <222> LOCATION: (3)...(3)
208 <223> OTHER INFORMATION: Xaa = Met or Val
210 <221> NAME/KEY: VARIANT
211 <222> LOCATION: (4)...(4)
212 <223> OTHER INFORMATION: Xaa = His, Arg or Gln
214 <221> NAME/KEY: VARIANT
215 <222> LOCATION: (5)...(5)
216 <223> OTHER INFORMATION: Xaa = Lys, Asp or Gly
218 <400> SEQUENCE: 9
219 Lys Xaa Xaa Xaa Xaa Ser Gly
220  1               5
222 <210> SEQ ID NO: 10
223 <211> LENGTH: 8
224 <212> TYPE: PRT
225 <213> ORGANISM: Unknown
227 <220> FEATURE:
228 <223> OTHER INFORMATION: R1
230 <221> NAME/KEY: VARIANT
231 <222> LOCATION: (3)...(3)
232 <223> OTHER INFORMATION: Xaa = Thr or Met
234 <221> NAME/KEY: VARIANT
235 <222> LOCATION: (4)...(4)
236 <223> OTHER INFORMATION: Xaa = Met or Val
238 <221> NAME/KEY: VARIANT
239 <222> LOCATION: (5)...(5)
240 <223> OTHER INFORMATION: Xaa = His, Arg or Gln
242 <221> NAME/KEY: VARIANT
243 <222> LOCATION: (6)...(6)
244 <223> OTHER INFORMATION: Xaa = Lys, Asp or Gly
246 <400> SEQUENCE: 10
247 Pro Lys Xaa Xaa Xaa Xaa Ser Gly
248  1               5
250 <210> SEQ ID NO: 11
251 <211> LENGTH: 9
252 <212> TYPE: PRT
253 <213> ORGANISM: Unknown
255 <220> FEATURE:
256 <223> OTHER INFORMATION: R1
258 <221> NAME/KEY: VARIANT
```

RAW SEQUENCE LISTING   DATE: 01/30/2002
PATENT APPLICATION: US/09/902,517   TIME: 16:16:54

Input Set : D:\21900-20252.txt
Output Set: N:\CRF3\01302002\I902517.raw

```
259 <222> LOCATION: (4)...(4)
260 <223> OTHER INFORMATION: Xaa = Thr or Met
262 <221> NAME/KEY: VARIANT
263 <222> LOCATION: (5)...(5)
264 <223> OTHER INFORMATION: Xaa = Met or Val
266 <221> NAME/KEY: VARIANT
267 <222> LOCATION: (6)...(6)
268 <223> OTHER INFORMATION: Xaa = His, Arg or Gln
270 <221> NAME/KEY: VARIANT
271 <222> LOCATION: (7)...(7)
272 <223> OTHER INFORMATION: Xaa = Lys, Asp or Gly
274 <400> SEQUENCE: 11
275 Ser Pro Lys Xaa Xaa Xaa Xaa Ser Gly
276 1               5
278 <210> SEQ ID NO: 12
279 <211> LENGTH: 4
280 <212> TYPE: PRT
281 <213> ORGANISM: Unknown
283 <220> FEATURE:
284 <223> OTHER INFORMATION: R2
286 <221> NAME/KEY: VARIANT
287 <222> LOCATION: (1)...(1)
288 <223> OTHER INFORMATION: Xaa = Asn or Lys
290 <400> SEQUENCE: 12
291 Xaa Val Leu Arg
292 1
294 <210> SEQ ID NO: 13
295 <211> LENGTH: 5
296 <212> TYPE: PRT
297 <213> ORGANISM: Unknown
299 <220> FEATURE:
300 <223> OTHER INFORMATION: R2
302 <221> NAME/KEY: VARIANT
303 <222> LOCATION: (1)...(1)
304 <223> OTHER INFORMATION: Xaa = Asn or Lys
306 <221> NAME/KEY: VARIANT
307 <222> LOCATION: (5)...(5)
308 <223> OTHER INFORMATION: Xaa = Arg or Lys
310 <400> SEQUENCE: 13
311 Xaa Val Leu Arg Xaa
312 1               5
314 <210> SEQ ID NO: 14
315 <211> LENGTH: 6
316 <212> TYPE: PRT
317 <213> ORGANISM: Unknown
319 <220> FEATURE:
320 <223> OTHER INFORMATION: R2
322 <221> NAME/KEY: VARIANT
323 <222> LOCATION: (1)...(1)
```

Use of n and/or Xaa has been detected in the Sequence Listing.
Review the Sequence Listing to insure a corresponding
explanation is presented in the <220> to <223> fields of
each sequence using n or Xaa.

VERIFICATION SUMMARY   DATE: 01/30/2002
PATENT APPLICATION: US/09/902,517   TIME: 16:16:55

Input Set : **D:\21900-20252.txt**
Output Set: **N:\CRF3\01302002\I902517.raw**

```
L:117 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:139 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:163 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:247 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:275 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:291 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:311 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:335 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:648 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33
```